

Nama: Hilmi Hanif
NIM : A11.2021.13491
Kelompok: 4211

Store Procedure and Trigger

Pembuatan table

```
create table student(  
  regNo char(2),  
  name varchar(20) not null,  
  primary key(regNo)  
)engine=InnoDB;
```

Saya membuat tabel log_student terdapat regNo dan name supaya dapat memberi tahu data yang sudah ditambahkan, diubah maupun dihapus

```
create table log_student(  
  event varchar(15) not null,  
  regNo char(2),  
  name varchar(20),  
  time datetime  
)engine=InnoDB;
```

Pembuatan Trigger

- **Insert**

```
delimiter $$  
create trigger insert_log_student  
  after insert  
  on student  
  for each row  
begin  
  insert into log_student(event, regNo, name, time)  
  values ("add data", new.regNo, new.name, now());  
end$$  
delimiter ;
```

- **Update**

```
delimiter $$
create trigger update_log_student
    before update
    on student
    for each row
begin
    insert into log_student
    set regNo = old.regNo,
    event = "update data",
    name = new.name,
    time = now();
end$$
delimiter ;
```

- **Delete**

```
delimiter $$
create trigger delete_log_student
    after delete
    on student
    for each row
begin
    insert into log_student(event, regNo, name, time)
    values ("Delete data", old.regNo, old.name, now());
end$$
delimiter ;
```

Pembuatan Store Procedure

- **Untuk menselect tabel student**

```
delimiter $$
create procedure selectStudent()
begin
    select * from student;
end$$
delimiter ;
```

- Untuk menselect tabel log_student

delimiter \$\$

create procedure selectlog_Student()

begin

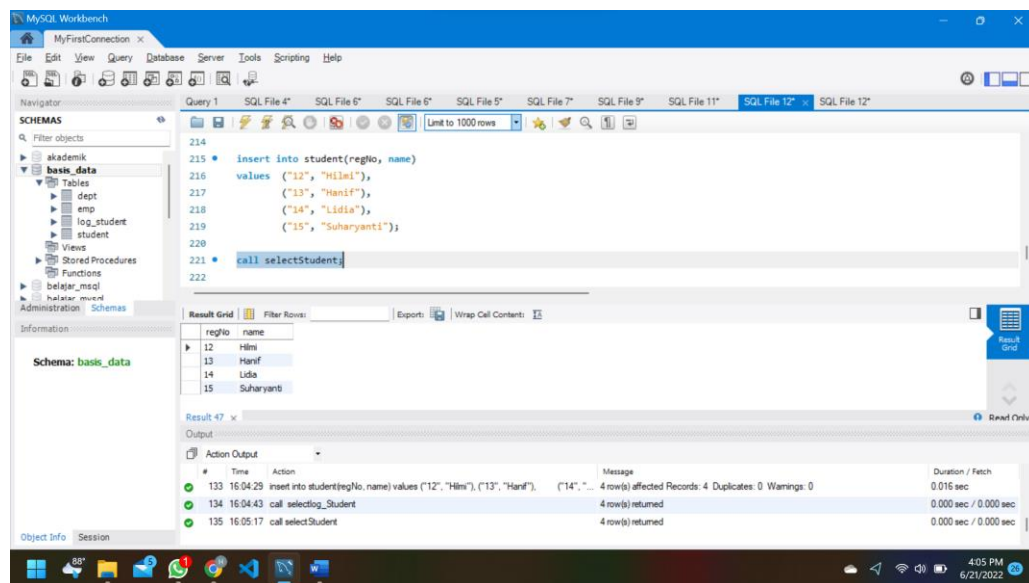
select * from log_student;

end\$\$

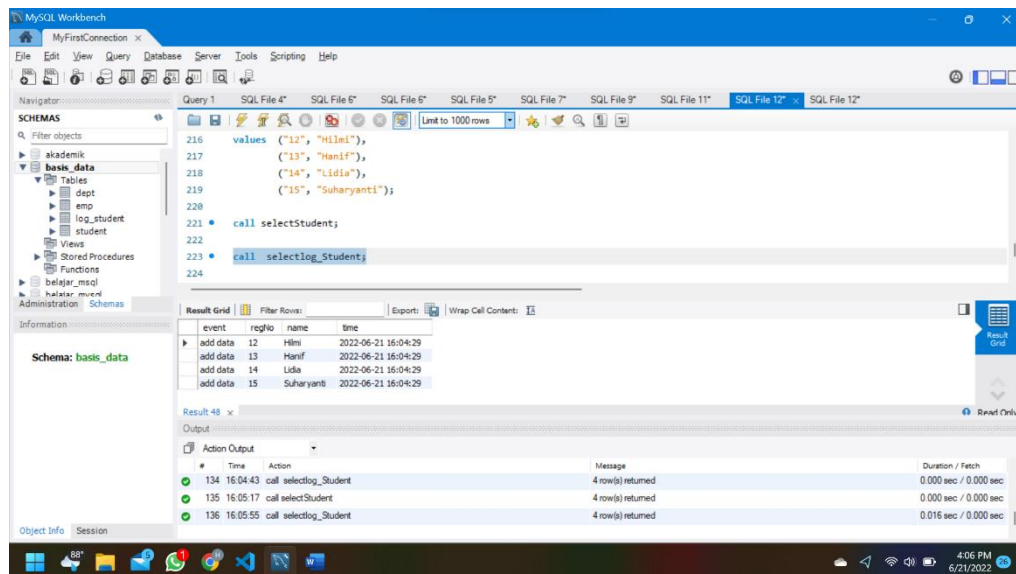
delimiter ;

Hasil

Saya Menambahkan data pada tabel student dan memanggilnya dengan Store Procedure



Data yang baru saya tambahkan akan otomatis tereksekusi ditabel log_student karena adanya trigger



Saya update data dari beberapa record tabel student

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following queries:

```
224 • update student
225   set name = "Hilmi Yahya"
226   where regNo = "12";
227
228 • update student
229   set name = "Hanif Tambunan"
230   where regNo = "13";
231
232 • call selectStudent;
```

The Result Grid shows the data from the `selectStudent` query:

regNo	name
12	Hilmi Yahya
13	Hanif Tambunan
14	Lida
15	Suharyanti

The Action Output shows the execution results:

#	Time	Action	Message	Duration / Fetch
140	16:09:32	call selectlog_Student	5 row(s) returned	0.000 sec / 0.000 sec
141	16:10:54	call selectStudent	4 row(s) returned	0.000 sec / 0.000 sec

Data yang baru saya Update akan otomatis tereksekusi ditabel log_student karena adanya trigger

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following queries:

```
224 • update student
225   set name = "Hilmi Yahya"
226   where regNo = "12";
227
228 • update student
229   set name = "Hanif Tambunan"
230   where regNo = "13";
231
232 • call selectlog_Student;
```

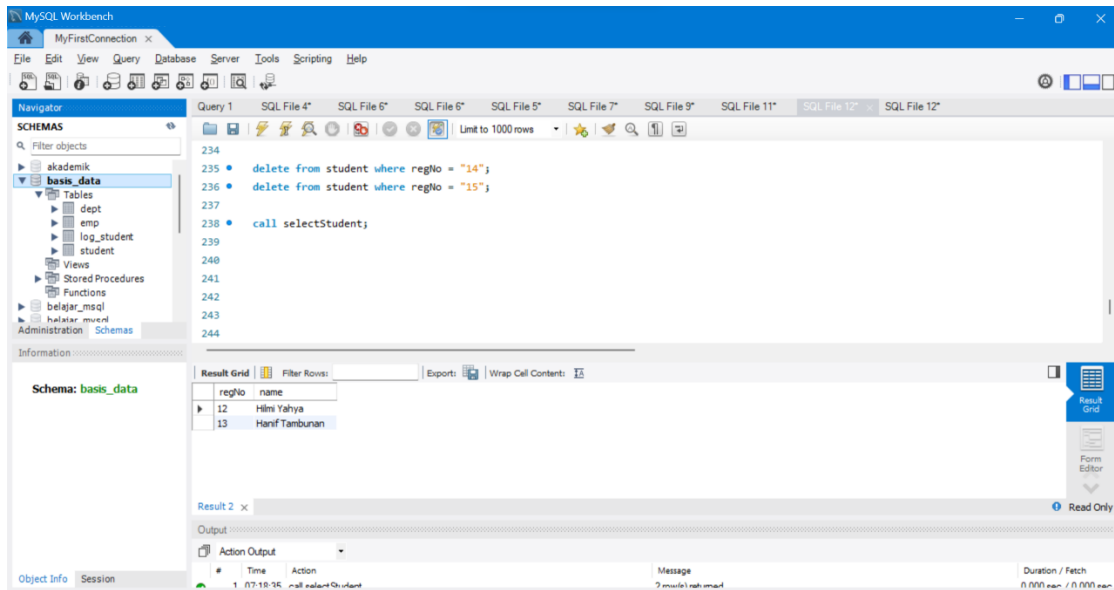
The Result Grid shows the data from the `selectlog_Student` query:

event	regNo	name	time
add data	12	Hilmi	2022-06-21 16:04:29
add data	13	Hanif	2022-06-21 16:04:29
add data	14	Lida	2022-06-21 16:04:29
add data	15	Suharyanti	2022-06-21 16:04:29
update data	12	Hilmi Yahya	2022-06-21 16:08:44
update data	13	Hanif Tambunan	2022-06-21 16:09:30

The Action Output shows the execution results:

#	Time	Action	Message	Duration / Fetch
138	16:08:50	call selectlog_Student	5 row(s) returned	0.000 sec / 0.000 sec
139	16:09:30	update student set name = "Hanif Tambunan" where regNo = "13"	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.000 sec

Saya Delete data dari beberapa record pada tabel student



Data yang baru saya Delete akan otomatis tereksekusi ditabel log_student karena adanya trigger

